

Application No. 10/803,255

REMARKS**Specification Objections.**

2. The Office Action states that the "specification is objected to as failing to
5 provide proper antecedent basis for the claimed subject matter.

Regarding Claims 26, 54 and 81, the Office Action states that "a limitation of a
special wildcard input that is associated with any or all tones" lacks antecedent
basis and/or clear description in the specification (see closet disclosure on page
10 22, lines 20-23)." Regarding Claim 46, the Office Action states that "the
limitation of "a special wildcard input that is associate with zero or one of strokes"
lacks antecedent basis and/or clear description in the specification (see closet
disclosure on page 22, lines 20-23)."

- 15 Applicant has amended the Specification to provide proper antecedent basis for
the claimed subject matter of Claims 26, 46, 54 and 81. Support is seen in the
Application as filed, at least on page 22, lines 20-23, and in Claims 26-27, 46,
54-55 and 81-82. Applicant respectfully submits that the Specification as
amended overcomes the objections.

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- Applicant has amended dependent Claim 26, to claim "the method of Claim 1,
wherein one of said plurality of inputs is associated with a special wildcard input
that is associated with zero or one of any of said strokes and said phonetic
characters." Applicant has also amended dependent Claim 54, to claim "the
25 system of Claim 29, wherein one of said plurality of inputs is associated with a
special wildcard input that is associated with zero or one of any of said strokes
and said phonetic characters." Applicant has also amended dependent Claim
81, to claim "the medium of Claim 56, wherein one of said plurality of inputs is
associated with a special wildcard input that is associated with zero or one of any
30 of said strokes and said phonetic characters." Support is seen in the Application
as filed, at least on page 22, lines 20-23, and in Claims 26-27, 46, 54-55 and 81-
82.

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Claim Objections.

3. Claims 28, 30, 32, 34-35, 37-39, 45-48, 5, 54-55, 57, 59, 61-62, 64-66, 72-73, 76, 79, 80 and 81-82 are objected to because of the following informalities:

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3a. Regarding Claim 28, the Office Action states that the claim is duplicated from Claim 4, and that appropriate correction or cancellation is required.

10 Applicant has amended dependent Claim 4, to claim "the method of Claim 1, further comprising the step of:

optionally displaying one or more of said matched ideographic character sequences."

Support is seen in the Application as filed, at least in Claims 1, 29 and 56.

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Applicant submits that Claim 4 as amended, does not claim the same matter as dependent Claim 28.

20 3b. Regarding the Objection to Claim 30, Applicant has amended Claim 30, to properly depend from Claim 29.

25 3c. Regarding the Objections to Claims 32, 34-35, 37-39, 45-48, 51 and 54-55, Applicant has amended Claims 32, 34-35, 37-39, 45-48, 51 and 54-55 to properly depend from Claim 29.

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Applicant has also amended dependent Claims 33, 36, 40-44, 49-50 and 52-53, to properly depend from the claims to which they are associated, such that Claim 33 depends from Claim 32, Claim 36 depends from Claim 35, Claim 40 depends from Claim 39, Claim 41 depends from Claim 40, Claim 42 depends from Claim 40, Claim 43 depends from Claim 42, Claim 44 depends from Claim 35, Claim 49 depends from Claim 48, Claim 50 depends from Claim 49, Claim 52 depends from Claim 51, and Claim 53 depends from Claim 52.

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3d. Regarding the Objections to Claims 57, 59, 61-62, 64-66, 72-73, 76, 79, and 81-82, Applicant has amended Claims 57, 59, 61-62, 64-66, 72-73, 76, 79, and 81-82 to depend on Claim 56.

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Applicant has also amended dependent Claims 58, 60, 63, 67-71, 75, 77-78 and 80, to properly depend from the claims to which they are associated, such that Claim 58 depends from Claim 57, Claim 60 depends from Claim 59, Claim 63 depends from Claim 62, Claim 67 depends from Claim 66, Claim 68 depends from Claim 67, Claim 69 depends from Claim 67, Claim 70 depends from Claim 69, Claim 71 depends from Claim 62, Claim 75 depends from Claim 74, Claim 77 depends from Claim 76, and Claim 78 depends from Claim 77.

3e. Regarding the Objection to Claim 80, Applicant has amended Claim 80 to depend from Claim 79.

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Applicant therefore submits that the aforementioned Claims have been amended to overcome the Objections.

20 **35 U.S.C. § 112. Claim Rejections.**

4. The Office Action states that "Claims 25 and 80 recite the limitation "the number of partial keystrokes" in the first line of the claims. There is insufficient basis for this limitation in the claim."

25 Applicant has amended Claim 25, to claim "the method of Claim 24, wherein the number of keystrokes for each partial syllable is one." Applicant has amended Claim 80, to claim "the medium of Claim 79, wherein the number of keystrokes for each partial syllable is one." Applicant has also amended the Specification, on page 13, lines 14-15, to more clearly state that "preferably, the number of
30 keystrokes for each partial syllable is one, for example, the first keystroke of each syllable". Support is seen in the Application as filed, at least on page 22, lines 13-15.

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Applicant submits that Claims 25 and 80, and the Specification, as amended, overcome the rejections under 35 U.S.C. §112, and are fully supported by the Application as filed.

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35 U.S.C. § 103. Claim Rejections.

5. Claims 1-15, 17, 19-23, 29-43, 47, 49-53, 56-70, 72 and 74-78 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chen (U.S. 6,073,146).

10 5a. In regard to Claim 29, the Office Action states that "Chen discloses a system and method for processing Chinese language text (title), comprising:

"a user input device having a plurality of input means, each of said input means being associated with a plurality of strokes or phonetic characters, an input sequence being generated each time when an input is elected by said user input device" (column 4, lines 28-43, 'entering phonetic Chinese (Pinyin and BPMF), 'the system has a novel keyboard (input device that has multiple keys that interpreted has a plurality of input means) with diacritic keys', 'a process ... determines that a syllable (an input) has been entered (selected) when a diacritic key is struck'; column 1, 'Five-Stroke method' and 'phonetic input');

20 "an input method specific database containing a plurality of input sequences and, associated with each input sequence, a set of phonetic sequences whose spellings correspond to the input sequence or a set of strokes sequences corresponding to the input sequence" (Fig. 3 and column 9, line 55 to column 10, line 49, 'a data structure 300 for the ASCII coding for Pinyin or mixed input (input sequences)'; Fig. 7 and column 11, line 62 to column 12, line 67, 'the Chinese syllable list 700 (including phonetic sequences)'; which corresponds to the claimed "input method specific database");

25 "an ideographic database containing a set of ideographic character sequences, wherein each ideographic character contains an ideographic index" and "a plurality of phonetic indices to corresponding phonetic sequences" column 4, lines 3-17, 'converting phonetic Chinese (Pinyin or BPMF) input to character writing (Hanzi) (ideographic character)', and using 'square-character (Hanzi)

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stream, in the GB2312-80 form' (corresponding to Hanzi database or an ideographic base); column 6, lines 20-32, 'displays the Pinyin characters 1020' and 'the Hanzi characters 1025', which inherently includes indices between the related phonetic sequences and ideographic character; col. 1, lines 38-53, 'Five-stroke methods' that inherently include indices between the related stroke sequences and ideographic character');

5 "means for comparing the input sequence with said input method specific database and finding indices to matching strokes entries or phonetic entries and said matching stroke entries or phonetic entries" (column 4, lines 44-49, 'the word string (input sequence) is compared to a dictionary (also interpreted as input method specific database) of phonetic words'; column 11, lines 21-22, 'matched string is used as a syllable input');

10 "means for converting said matching indices to stroke entries or phonetic entries to matching ideographic indices" (column 4, lines 3-17, 'converting phonetic Chinese (Pinyin or BPMF) input to character writing (Hanzi)(Ideographic character)', wherein the dictionary and Hanzi database stated above necessarily include entries and indices);

15 "means for retrieving matching ideographic character sequences from said ideographic database by said matching ideographic indices; and an output device for displaying one or more matched stroke or phonetic entries, and matched ideographic characters".

In regard to Claims 1-15, 17 and 19-23, the Office Action states that they recite a method. The rejection is based on the same reason described for claims 29-43, 25 47, and 49-53 respectively, because the claims recite the same or similar limitation(s) as claims 29-43, 47, and 49-53 respectively.

In regard to Claims 56-70, 72 and 74-78, the Office Action states that they recite a computer readable medium. The rejection is based on the same reason 30 described for claims 29-43, 47, and 49-53 respectively, because the claims recite the same or similar limitation(s) as claims 29-43, 47, and 49-53 respectively.

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5b. Applicant disagrees that Claims 29, 1 and 56 are unpatentable over Chen.

Hilton Davis / Festo Statement

5 For sake of convenience in prosecution, Applicant has amended Claims 29, 1 and 56, as discussed below, to particularly point out and distinctly claim some of the preferred embodiments of the invention. The amendments herein were not made for any reason related to patentability. Applicant reserves the right to present the same or similar claims in a related Application.

10 Applicant has amended independent Claim 29, to claim a system for receiving input sequences entered by a user and generating textual output in Chinese language, said system comprising:

15 a user input device having a plurality of input means, each of said input means being associated with any of a plurality of strokes and a plurality of phonetic characters, an input sequence being generated each time when an input means is selected by said user into said user input device, wherein said user selection of said input means is alternatively associated with any of said plurality of strokes and said plurality of phonetic characters;

20 an input method specific database containing a plurality of input sequences and, associated with each input sequence, any of a set of phonetic sequences whose spellings correspond to the input sequence and a set of stroke sequences corresponding to the input sequence;

25 an ideographic database associated with both phonetic input and stroke input, said ideographic database containing a set of ideographic character sequences, wherein each ideographic character contains an ideographic index, a plurality of stroke indices to corresponding stroke sequences and a plurality of phonetic indices to corresponding phonetic sequences;

means for comparing the input sequence with said input method specific database and finding any of

30 stroke indices corresponding to matching stroke entries, and
phonetic indices corresponding to matching phonetic entries;

means for converting any of

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said matching stroke indices associated with said matching stroke entries to matching ideographic indices; and

said matching phonetic indices associated with said matching phonetic entries to matching ideographic indices;

5 means for retrieving matching ideographic character sequences from said ideographic database by said matching ideographic indices; and

an output device for displaying one or more matched stroke or phonetic entries, and matched ideographic characters.

10 Applicant has amended independent Claim 1, to claim a method for input ideographic characters comprising the steps of:

(a) entering an input sequence into a user input device;

wherein said user input device comprises:

15 a plurality of input means, each of said input means being associated with any of a plurality of strokes and a plurality of phonetic characters, and an input sequence being generated each time when an input means is selected by a user into said user input device, wherein said user selection of said input means is alternatively associated with any of said plurality of strokes and said plurality of phonetic characters;

20 data comprising a plurality of input sequences and, associated with each input sequence, an input method specific database containing a plurality of input sequences and, associated with each input sequence, any of a set of phonetic sequences whose spellings correspond to the input sequence and a set of stroke sequences corresponding to the input sequence; and

25 an ideographic database associated with both phonetic input and stroke input, said ideographic database containing a set of ideographic character sequences, wherein each ideographic character contains an ideographic index, a plurality of stroke indices to corresponding stroke sequences and a plurality of phonetic indices to corresponding phonetic sequences;

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(b) comparing the input sequence with said input method specific database and finding any of

stroke indices corresponding to matching stroke entries, and

phonetic indices corresponding to matching phonetic entries;

5 (c) converting any of

said matching stroke indices to associated with said matching stroke entries to matching ideographic indices; and

said matching phonetic indices associated with said matching phonetic entries to matching ideographic indices; and

10 (d) retrieving matching ideographic character sequences from said ideographic database by said matching ideographic indices.

Applicant has amended independent Claim 56, to claim a computer usable medium containing instructions in computer readable form for carrying out a process for Chinese text entry, said process comprising the steps of:

15 (a) entering an input sequence into a user input device;

wherein said user input device comprises:

20 a plurality of input means, each of said input means being associated with any of a plurality of strokes and a plurality of phonetic characters, and an input sequence being generated each time when an input means is selected by a user into said user input device, wherein said user selection of said input means is alternatively associated with any of said plurality of strokes and said plurality of phonetic characters;

25 data comprising a plurality of input sequences and, associated with each input sequence, an input method specific database containing a plurality of input sequences and, associated with each input sequence, any of a set of phonetic sequences whose spellings correspond to the input sequence and a set of stroke sequences corresponding to the input sequence; and

30 an ideographic database associated with both phonetic input and stroke input, said ideographic database containing a set of ideographic character sequences, wherein each ideographic character contains an

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ideographic index, a plurality of stroke indices to corresponding stroke sequences and a plurality of phonetic indices to corresponding phonetic sequences;

- 5 (b) comparing the input sequence with said input method specific database and finding any of
- stroke indices corresponding to matching stroke entries, and
- phonetic indices corresponding to matching phonetic entries;
- (c) converting any of
- 10 said matching stroke indices associated with said matching stroke entries to matching ideographic indices; and
- said matching phonetic indices associated with said matching phonetic entries to matching ideographic indices;
- (d) retrieving matching ideographic character sequences from said ideographic database by said matching ideographic indices; and
- 15 (e) optionally displaying one or more of said matched ideographic character sequences.

Support is seen in the Application as filed, at least on page 8, line 12 to page 9, line 30; on page 11, line 2 to page 14, line 31; on page 16, line 3 to page 18, line 18; on page 19, line 28 to page 20, line 8; in Claims 1, 29 and 56; and in Figures 2-8.

Chen describes a "system and method for processing chinese language text" seen at least in the Abstract, wherein:

- 25 "Phonetic Chinese (Pinyin and BPMF) is entered into a computer system and accurately converted into the Hanzi form. The system has a novel keyboard with diacritic keys (and corresponding ASCII coding) that permit the user to annotate each entered phonetic text syllable with a diacritic
- 30 that indicates the tone of the syllable. A process executing on the system determines that a syllable has been entered when a diacritic (or delimiter) key is struck. An entered phonetic syllable is then compared to a list of

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acceptable phonetic syllables and abbreviations. If the entered syllable is on the list, the correctly spelled and accented syllable is stored in memory and displayed on a phonetic portion of a graphical display. The process continues for succeeding syllables until a delimiter is entered. Upon
5 encountering a delimiter, the word string (defined as the string of characters between two delimiters) is analyzed using morphological and syntactical processes and/or a statistical language model to unambiguously determine the proper Hanzi characters that represent the word(s) in the word string. The unique Hanzi translation is stored in
10 memory and displayed on a Hanzi portion of the graphical interface."

As seen in Claims 1, 29, and 56, as amended, the user input device has a plurality of input means, each of said input means being associated with any of a plurality of strokes and a plurality of phonetic characters, an input sequence
15 being generated each time when an input means is selected by the user into the user input device, wherein the user selection of the input means is alternatively associated with any of the plurality of strokes and the plurality of phonetic characters.

20 As noted above, the Examiner stated in regard to Claims 29, 1 and 56 as filed, that Chen teaches "a user input device having a plurality of input means, each of said input means being associated with a plurality of strokes or phonetic characters, an input sequence being generated each time when an input is elected by said user input device" (column 4, lines 28-43, 'entering phonetic
25 Chinese (Pinyin and BPMF), 'the system has a novel keyboard (input device that has multiple keys that interpreted has a plurality of input means) with diacritic keys', 'a process ... determines that a syllable (an input) has been entered (selected) when a diacritic key is struck'; column 1, 'Five-Stroke method' and 'phonetic input').

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Applicant submits that the user input device, as Claimed in Claims 1, 29, and 56, as amended, is significantly different that the keyboard of Chen. Details

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regarding keyboard entry are seen in Chen, at least in col. 4, lines 28-43, wherein"

5 "The invention is a system and method for accurately and efficiently entering phonetic Chinese (Pinyin and BPMF) into a computer system and for accurately converting the phonetic input into the Hanzi form. The system has a novel keyboard with diacritic keys (and corresponding ASCII coding) that permit the user to annotate each entered phonetic text syllable with a diacritic that indicates the tone of the syllable. A process
10 executing on the system determines that a syllable has been entered when a diacritic (or delimiter) key is struck. An entered phonetic syllable is then compared to a list of acceptable phonetic syllables and abbreviations. If the entered syllable is on the list, the correctly spelled and accented syllable is stored in memory and displayed on a phonetic
15 portion of a graphical display. The process continues for succeeding syllables until a delimiter is entered."

Further details regarding keyboards and input keys are described by Chen, at least in Figures 1-2D, and in col. 5, lines 48-65; in col. 6, lines 21-23; in col. 6,
20 line 43 to col. 9, line 30.

As seen at least in Fig. 2A, Fig. 2C, and Fig. 2D of Chen, the keys are clearly not "associated with any of a plurality of strokes and a plurality of phonetic characters, an input sequence being generated each time when an input means
25 is selected by the user into the user input device, wherein the user selection of the input means is alternatively associated with any of the plurality of strokes and the plurality of phonetic characters."

For example the "T" key shown in Fig. 2A of Chen represents only "T", and is not
30 associated with a "plurality of phonetic characters".

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In stark contrast to the keyboard of Chen, as seen in Claims 1, 29, and 56, as amended, the user input device has a plurality of input means, each of said input means being associated with any of a plurality of strokes and a plurality of phonetic characters, an input sequence being generated each time when an input means is selected by the user into the user input device, wherein the user selection of the input means is alternatively associated with any of the plurality of strokes and the plurality of phonetic characters.

Exemplary details regarding the claimed user input device are seen in the Application as filed, as least in Figure 2, and on page 14, lines 18-31, wherein:

"Now referring to FIG. 2, which is a schematic view of an exemplary embodiment of a cellular telephone that incorporates a phonetic input method to a reduced keyboard system according to the invention. The portable cellular telephone 52 has a display 53 and contains a reduced keyboard 54 implemented on the standard telephone keys. For the purposes of this invention, the term "keyboard" is defined broadly to include any input device including a touch screen having defined areas for keys, discrete mechanical keys, membrane keys, and the like. The arrangement of the Latin alphabets on each key in the keyboard 54 is corresponding to what has become a *de facto* standard for American telephones. Note that keyboard 54 thus has a reduced number of data entry keys as compared to a standard QWERTY keyboard, where one key is assigned for each Latin alphabet. More specifically, the preferred keyboard shown in this embodiment contains ten data keys numbered '1' through '0' arranged in a 3-by-4 array, together with four navigation keys comprising of Left Arrow 61, and Right Arrow 62, Up Arrow 63 and Down Arrow 64."

As seen in Figure 2, the reduced keyboard includes a plurality of keys, e.g. corresponding to numbers 2 through 9, which are each alternatively associated with a plurality of letters, e.g. the exemplary key corresponding to the number "2"

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is alternatively associated with the letters "a", "b" and "c". As seen in the exemplary phonetic list 72 displayed in Figure 2, three of the possible phonetic entries for the sequential user selection of the keys "6" (alternatively associated with "M", "N" and "O") and "4" (alternatively associated with "G", "H" and "I") are displayed as "Ni", "Mi" and "Ng".

Applicant therefore submits that the user input device, as claimed in Claims 1, 29, and 56, is significantly different than Chen. As well, there is no suggestion in Chen, express or implied, that such a user input device be used.

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As also claimed in Claims 1, 29, and 56, as amended, the ideographic database is associated with both phonetic input and stroke input, since the ideographic database contains a set of ideographic character sequences, wherein each ideographic character contains:

- 15 an ideographic index,
- a plurality of stroke indices to corresponding stroke sequences; and a
- plurality of phonetic indices to corresponding phonetic sequences.

As noted above, the Examiner stated in regard to Claims 29, 1 and 56 as filed, that Chen describes:

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"an ideographic database containing a set of ideographic character sequences, wherein each ideographic character contains an ideographic index" and "a plurality of phonetic indices to corresponding phonetic sequences" column 4, lines 3-17, 'converting phonetic Chinese (Pinyin or BPMF) input to character writing (Hanzi) (Ideographic character)', and using 'square-character (Hanzi) stream in the GB2312-80 form' (corresponding to Hanzi database or an ideographic base); column 6, lines 20-32, 'displays the Pinyin characters 1020' and 'the Hanzi characters 1025', which inherently includes indices between the related phonetic sequences and ideographic character; col. 1, lines 38-53, 'Five-

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stroke methods' that inherently include indices between the related stroke sequences and ideographic character')."

Applicant submits that Chen fails to disclose "an ideographic database associated with both phonetic input and stroke input, said ideographic database containing a set of ideographic character sequences, wherein each ideographic character contains an ideographic index, a plurality of stroke indices to corresponding stroke sequences and a plurality of phonetic indices to corresponding phonetic sequences".

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The Office Action also states, in regard to col. 1, lines 38-53 of Chen, that 'Five-stroke methods' inherently include indices between the related stroke sequences and ideographic character. However, Chen discloses a system and method for entering phonetic Chinese (Pinyin and BPMF), and converting to Hanzi. Chen does not disclose a system for entering stroke based input, not is there any suggestion, express or implied, that Chen be modified to provide stroke-based input.

Furthermore, as seen in Claims 1, 29, and 56, as amended, the ideographic database associated with both phonetic input and stroke input, wherein the ideographic database contains a set of ideographic character sequences, wherein each ideographic character contains:

an ideographic index,
a plurality of stroke indices to corresponding stroke sequences; and
a plurality of phonetic indices to corresponding phonetic sequences.

Applicant respectfully submits that Chen is silent in regard to an ideographic database associated with both phonetic input and stroke input, wherein the ideographic database contains a set of ideographic character sequences, wherein each ideographic character contains:

an ideographic index,
a plurality of stroke indices to corresponding stroke sequences; and

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a plurality of phonetic indices to corresponding phonetic sequences.

As well, there is no suggestion, express or implied, that Chen be modified to provide an ideographic database associated with both phonetic input and stroke
5 input, wherein the ideographic database contains a set of ideographic character sequences, wherein each ideographic character contains:

- an ideographic index,
- a plurality of stroke indices to corresponding stroke sequences; and
- a plurality of phonetic indices to corresponding phonetic sequences.

10 It would therefore take significant modification and undue experimentation, to meet Claims 1, 29, and 56, as amended.

Applicant therefore submits, in regard to Claims 1, 29, and 56, as amended, that
15 Chen does not teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention, or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been
20 obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)).

Applicant therefore submits that independent Claims 29, 1 and 56 as amended, overcome the rejections under 35 U.S.C. §103(a) as being unpatentable over
25 Chen.

As Claims 2-28 depend from independent Claim 1, as Claims 30-55 depend from independent Claim 29, and as Claims 57-82 depend from independent Claim 56, and inherently contain all the limitations of the claims they depend from, they are
30 seen to be patentable as well.

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6. The Office Action states that Claims 16, 18, 24-25, 44, 48, 71, 73 and 79-80 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Chen in view of Lee et al. (US 6,848,080 B1) hereinafter referenced as Lee."

5 Lee et al. describe a "language input architecture for converting one text form to another text form with tolerance to spelling, typographical, and conversion errors, as seen at least in the abstract, wherein"

10 "A language input architecture converts input strings of phonetic text to an output string of language text. The language input architecture has a search engine, one or more typing models, a language model, and one or more lexicons for different languages. The typing model is configured to generate a list of probable typing candidates that may be substituted for the input string based on probabilities of how likely each of the candidate
15 strings was incorrectly entered as the input string. The language model provides probable conversion strings for each of the typing candidates based on probabilities of how likely a probable conversion output string represents the candidate string. The search engine combines the probabilities of the typing and language models to find the most probable
20 conversion string that represents a converted form of the input string."

As discussed above, and as seen in Claims 1, 29, and 56, as amended, the user input device has a plurality of input means, each of said input means being associated with any of a plurality of strokes and a plurality of phonetic
25 characters, an input sequence being generated each time when an input means is selected by the user into the user input device, wherein the user selection of the input means is alternatively associated with any of the plurality of strokes and the plurality of phonetic characters.

30 While Lee et al. describe the conversion of "input strings of phonetic text to an output string of language text", Applicant submits that Lee et al. is silent in regard to an input device which has a plurality of input means, each of said input means

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being associated with any of a plurality of strokes and a plurality of phonetic characters, an input sequence being generated each time when an input means is selected by the user into the user input device, wherein the user selection of the input means is alternatively associated with any of the plurality of strokes and
5 the plurality of phonetic characters.

Also as discussed above, and as seen in Claims 1, 29, and 56, as amended, the ideographic database is associated with both phonetic input and stroke input, since the ideographic database contains a set of ideographic character
10 sequences, wherein each ideographic character contains:

- an ideographic index,
- a plurality of stroke indices to corresponding stroke sequences; and
- a plurality of phonetic indices to corresponding phonetic sequences.

15 Applicant submits that, while Lee et al. describe a language input architecture for converting input strings of phonetic text to an output string of language text (e.g. as seen at least in the Abstract), Lee et al. fail to disclose an ideographic database associated with both phonetic input and stroke input, wherein the ideographic database contains a set of ideographic character sequences,
20 wherein each ideographic character contains:

- an ideographic index,
- a plurality of stroke indices to corresponding stroke sequences; and
- a plurality of phonetic indices to corresponding phonetic sequences.

25 As well, there is no suggestion, express or implied, that Chen and/or Lee et al. be modified to provide an ideographic database associated with both phonetic input and stroke input, wherein the ideographic database contains a set of ideographic character sequences, wherein each ideographic character contains:

- an ideographic index,
- 30 a plurality of stroke indices to corresponding stroke sequences; and
- a plurality of phonetic indices to corresponding phonetic sequences.

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It would therefore take significant modification and undue experimentation, to meet Claims 1, 29, and 56, as amended.

Applicant therefore submits, in regard to Claims 1, 29, and 56, as amended, that
5 Chen and/or Lee et al. fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention, or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have
10 been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)).

Applicant therefore submits that independent Claims 1, 29 and 56, as amended, overcome the rejections under 35 U.S.C. 103 (a) as being unpatentable over
15 Chen in view of Lee et al. (US 6,848,080 B1).

As dependent claims 16, 18 and 24-25 depend from amended independent Claim 1, as dependent claims 44 and 48 depend from amended independent Claim 29, and as dependent claims 71, 73 and 79-80 depend from amended
20 independent Claim 56, and inherently contain all the limitations of the claims they depend from, they are seen to be patentable as well.

7. The Office Action states that "Claims 26-27, 46, 54-55 and 81-82 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Chen in view of well known
25 prior art (MPEP 2144.03)".

The Office Action states that "as per claim 46 (depending on claim 29), Chen does not expressly disclose "one of said plurality of inputs is associated with a special wildcard input that is associated with any or all tones". However, an
30 official notice is taken that the concept of using a wildcard input for comparing, matching, or filtering an input symbols/texts is well known in the art.

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Applicant disagrees that the use of a wildcard input for comparing, matching, or filtering an input symbols/texts is well known in the art of phonetic and/or stroke based input systems. Applicant submits that the absence of relevant example indicates that the use of one of said plurality of inputs is associated with a special wildcard input that is associated with "any or all tones" or "zero or one of said phonetic characters" is not obvious.

As well, as discussed above, Independent Claims 1, 29 and 56 have been amended, as discussed above. Applicant submits that independent Claims 1, 29 and 56, as amended, overcome the rejections under 35 U.S.C. 103 (a) as being unpatentable over Chen.

Applicant submits that Examiner's statements in regard to the use of "wildcard input for comparing, matching, or filtering an input symbols/texts" has nothing to do with

Applicant therefore submits, in regard to Claims 1, 29, and 56, as amended, that Chen and/or Examiner's statements in regard to the use of "wildcard input for comparing, matching, or filtering an input symbols/texts" fail to teach or suggest all the claim limitations (MPEP 2142, 2143.03). To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention, or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references (Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), MPEP 706.02(j)).

Applicant therefore submits that independent Claims 1, 29 and 56, as amended, overcome the rejections under 35 U.S.C. 103 (a) as being unpatentable over Chen in view of Examiner's statements regarding the use of "wildcard input for comparing, matching, or filtering an input symbols/texts".

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As dependent claims 26-27 depend from amended independent Claim 1, as dependent claims 46 and 54-55 depend from amended independent Claim 29, and as dependent claims 81-82 depend from amended independent Claim 56, and inherently contain all the limitations of the claims they depend from, they are
5 seen to be patentable as well.

8. Applicant has amended the Specification on page 8, lines 12-18, to correct a grammatical error.

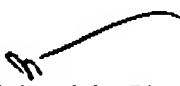
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CONCLUSION

For the foregoing reasons, the claims in the present application are patentably
5 distinguished over the cited references. Applicant also submits that the
amendments do not introduce new matter into the Application. Based on the
foregoing, Applicant considers the invention to be in condition for allowance.
Applicant earnestly solicits the Examiner's withdrawal of the rejections set forth
10 in the prior Office Action, such that a Notice of Allowance is forwarded to
Applicant, and the present application is therefore allowed to issue as a United
States Patent.

Respectfully Submitted,

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